Technology and delivery: Assessing the impact of new media on "borderless" education

STUART CUNNINGHAM QUT

New Media and Borderless Education: The State of Play

The impact of the forces of internationalisation and technological change has been felt widely throughout the world, most noticeably in a general shift in employment from manufacturing and commodity-based industries to service industries and those based on the deployment of higher-level skills and knowledge. In the so-called 'knowledge age', growing importance is attached to lifelong learning and the capacity of service providers to stay abreast of change and respond quickly to emerging markets. Growth in the power of communication and information technologies (CITs), and their convergence in the form of the Internet, is therefore assuming ever greater significance. These developments are unfolding against a background of public sector reform in many countries, where governments have been seeking for some time to reduce the size of the public sector and to make publicly-funded agencies operate with greater efficiency and effectiveness.

Universities, as producers and disseminators of knowledge, and in many cases publicly funded, are inevitably caught up in these developments. Commentators have heralded fundamental change to the structure and function of the traditional campus-based university, pointing to initiatives such as the Western Governors University (a consortium arrangement to offer courses from universities in 10 western US states in a technology-based 'smorgasbord' program), the expansion of technologymediated distance education, and the emergence of successful private universities, such as the University of Phoenix. These programs aim to service the education needs of working adults and corporate clients, without major investments in 'bricks and mortar,' by using CITs for distributed teaching and learning. A frequent scenario put forward is that dominant players in the media will enter the higher education market, either as producers themselves or in alliance with leading universities.

The study, then, sought to monitor these developments and to evaluate various core perceptions:

- global media networks (GMNs) were entering, or about to enter, the tertiary market;
- overseas universities were extending their access to local students through new media;
- new providers were coming, perhaps through franchising or similarly flexible arrangements;
- existing or new vocational and educational providers were going to move into areas which had been the province of traditional higher education providers.

In a project funded by DEETYA in 1997 through its Evaluations and Investigations (EIP) program, a QUT-based research team interviewed more than 140 people who it identified as 'key players' from government, industry, media networks and the higher education sector, in 10 countries in Asia, Europe, North America and Australia (Cunningham *et. al.* 1998). It was a global mapping exercise - the first intensive effort to go beyond the rhetoric and analyse reality in this area. This 'on-theground' data was analysed and built into a taxonomy which differentiated the various players by the reach of their activities, whether global, regional, international or local. This taxonomy provided the basis for examining a series of issues pertinent to the future development of technology and media in higher education.

The most prominent finding was that the rhetoric of globalisation and media involvement far outstripped the reality. The 'Death Star' scenario - where global media networks such as Microsoft, Disney, Time-Warner, News Corporation or other major media players might team up with leading universities to deliver global education via satellite or the Internet - was considered implausible by many respondents. This was partly because of the conflict in mission between providing elite higher education and seeking to 'go global' in search of mass

markets. Also, the core business of these large corporations is entertainment and infotainment - education (as opposed to training) is perceived to be a qualitatively different enterprise.

Prospects for alliances between media organisations and less elite universities were considered better, particularly in fields such as professional education and catering for working adult students. However even here was little evidence that media organisations perceived higher education to be a profitable area. In practice, the major educational engagements of communications networks are directed to the schools sector, where the closest thing to mass markets can be found, rather than to universities. Furthermore, most of the co-operative endeavours of universities and media organisations relate to corporate training, or to efforts by computer and software companies to encourage the adoption of their products by institutions as universities move to increase their use of information technology. So, the focus is on carriage rather than content, and on a training model rather than education - what Luke (1996) has described as "just in time, just down the corridor, and just enough!"

It would, however, be highly misleading to conclude from this that technological developments are not having an impact on higher education. To the contrary, New Media and Borderless Education found a vast array of activities driven by different individuals and agencies, each seeking to further specific objectives. Some governments, keen to use the potential of technology to widen access to higher education at lower cost, are sponsoring virtual universities which broker access to existing university courses. The Western Governors University, the APEC Virtual University and Open Learning Australia are all examples of this type. Many universities are expanding distance education, in many cases using the Internet, to deliver courses within their region and in some cases internationally. This is happening both at the elite and the mass market ends of the higher education spectrum. Others are using technology to deliver tailored training for corporate clients, in some cases delivering the training to the workplace. Different providers are seeking out different niches within the higher education market.

A realistic assessment of the situation is that there is a great deal of enthusiasm and many initiatives have been launched, but very few have progressed beyond the earliest stages. Despite the talking-up of the 'global' opportunities presented to education providers in a world made more accessible by new technologies, we found no evidence of any global education providers, several examples of international and regional providers and many more examples of providers targeting local or national markets. While recognising that many of these ventures are only beginning, and some will fail, it is clear that there are fundamental shifts occurring in the conception of higher education and its delivery.

The development of these emerging models is governed by five broad classes of issues:

- practical issues including questions of cost, intellectual property, core business, and student access;
- pedagogical issues including questions of education versus training, the effect of technology on learning, and cultural differences in learning styles;
- policy issues primarily to do with accreditation and consumer protection from poor-quality 'diploma mills', and with the possibility of allowing overseas private providers access to public higher education funds;
- philosophical issues access and equity, 'cultural imperialism', and questions about the nature of a university; and
- personal issues attitudes of staff and students towards changed delivery methods.

Successful navigation of these issues is no easy matter, particularly when dealing with markets that are not immediately- or with any certainty- profitable.

The challenge for universities and governments will be to adapt to a dynamic new environment, where lucrative national and international markets arising from the growing importance of lifelong learning will be contested strongly by traditional universities, new forms of universities, and by non-university providers. Threats and opportunities for existing universities depend very much on competitive advantage, which might depend upon their institutional 'branding', the nature of their student market, and their ability to adapt offerings to suit. Where there is demand for what technology can provide, then such change will occur.

The conclusion is that we should neither be alarmed nor seduced by promises of global revolution in higher education arising from information technology and the involvement of media organisations. Fundamental change to the higher education sector may be coming, but it will take longer than some pundits have predicted. Nor will all today's universities be overwhelmed by a global move to a single new approach to higher education. This study supports the notion that demand for higher education is diverse, and that diversity of institutional form and delivery is not only desirable but inevitable.

What the critics have said

Criticisms of the report that have been voiced include that it is too complacent about the future, and that we underestimate current developments that are already shifting the paradigm of post-compulsory education provision. Given that two things which are commonly underestimated are the impact of technological change and the rate of growth in demand for postsecondary

education, these were criticisms which needed to be addressed.

In New Media and Borderless Education, we were trying to provide a real evidential base for discussions, which all too often proceeded with little or no such evidence beyond rumour, business planning, and second and third hand accounts. Our timeframe was specifically not the twenty-year crystal ball exercise which members of the West Committee were working with. Rather, we wanted to provide a current 'reality check' and a short-to-medium term outlook, and our detailed scenario-building reflected that. And when the really challenging current models are closely looked at, like the University of Phoenix and the Apollo Group, what we see is very little in the way of radical virtualisation and a high technological delivery base, but rather a model of adult and workplace education delivering face-to-face seminars and facilitations with very low staff:student

The main finding - of the prospect of major disaggregation of the post-secondary market, with cream-skimming of the relatively lucrative lifelong learning and corporate and other postgraduate areas to new providers, including overseas providers - is certainly not an invitation to complacency. And the way forward, the opportunities, for Australian higher education, which lie in the hard work of incremental consolidation of our strengths, including in international educational services provision, along with winning new niche markets. This would be a more realistic and fruitful response than working ourselves into a lather about imminent paradigm shifts that will sweep us all away in a tsunami of uncontrollable technologically-driven change.

What the West Report says

What then does the West Report say about technology and delivery, particularly in the light of the parameters of the New Media and Borderless Education report and its findings? West tells us that "technology will revolutionise higher education" (West 1998, p. 59). Notwithstanding the acknowledgment that established research suggests that technology solutions may add to rather than decrease the costs of production delivery (see Ryan in this issue), West comments that "technologies offer significant opportunities to enhance the quality, accessibility and cost effectiveness of higher education teaching and research" but this is predicated on a significant ramp-up of the economies of scale achieved in Australian higher education delivery. The West Report states unequivocally that the most significant effects of the application of technologies will be in very large introductory level units, "where subject matter is largely standard across institutions and no longer subject to academic debate" (West 1998, p. 61).

However, this is at precisely the opposite end of the higher education spectrum - the mass undergraduate end - than those parts of post-compulsory learning which we found to be most contestable in both a national and international setting. The core and arguably irreplaceable value of the 'campus experience' - the experiences it can engender of interpersonal modelling of a life of inquiry, debate, dialogue and interaction- to the impressionable undergraduate is one that was strongly reinforced by major corporate players as much as academic stakeholders. As John Richards, Senior Vice-President and General Manager of Turner Learning, an educational arm of Turner Broadcasting, told us, "... I don't think we'll ever see a Time-Warner University - and if we did I don't think I'd want to go" (quoted in Cunningham et. al. 1998, p. 107).

Complementary to this in the West Report is the attractions of the model of the mega-university (West 1998, p. 63), delivering at a distance to relatively huge numbers of clients nationally, regionally and internationally. However, apart from Open University's John Daniel's own disclaimers on the applicability of the model (quoted in West 1998, p. 64), our research found that these institutions are subject to extremely high attrition rates and suffer from accusations and perceptions of second rate education (quoted in Cunningham *et. al.* 1998, p. 84).

West says that "competition will intensify". This is the only point in the final report in which West acknowledges the research we have done. West accepts that pressures external to the higher education sector are for change in the longer term and that our research evidences a relative lack of interest from big corporate players in the higher education market - based upon its perceived lack of profitability (West 1998, p. 62). However, without any additional evidence - indeed with the acknowledgment that Australia is already well served by strong higher education system, and thus "potential competitors in the international arena may see it as a nonattractive initial target compared with rapidly developing countries such as China", it simply asserts that "in the longer term, we expect international competitive pressures to intensify as a power of information and communication technologies increases and international pressures for trade liberalisation continue to grow" (West 1998, p. 63).

Conclusion

It would be fair to say that the West Report does not articulate in any usable detail the pathways from here to twenty years on that technology and the delivery of educational services might take. This is to be contrasted reasonably strongly to the details provide in the Dearing Committee report in the UK. Nevertheless, we can be sure that the issues will not diminish in centrality and

importance, and that a thoroughly bipartisan political approach, as well as the constant prodding of corporate sector - will consolidate and continue. Witness, as one example, the envisioning that Labor's Federal shadow minister for Education, Mark Latham, is engaging in around new growth theory, which argues that the economic success of nations implicitly relies on investments in research and technological enhancement (Latham 1998). Another indication of the importance attached to these issues is found in Towards an Australian Strategy for the Information Economy, a Federal government policy statement which echoes the recurrent theme of post-secondary education's responsibility for ensuring universal IT functional literacies for all students, as a basis for lifelong learning and participation in the 'information age' (Ministerial Council for the Information Economy 1998).

It is worth mentioning some of the conclusions to our report, as they remain pertinent in our context today:

- the education market is segmenting with increasing demand for education and training in the 25-year and up market ('lifelong' learning, leisure learning, CPE and postgraduate markets);
- new and existing providers are targeting the posttraditional-undergraduate markets identified above as sources of commercially-viable and profitable demand;
- governments and institutions need to take strategic and considered approaches to the integration of technology in teaching and learning, striking a balance between, on the one hand, blind belief in technology as the renaissance of teaching and the solution to existing cost and delivery pressures and,

- on the other, the temptation to continue teaching in a traditional manner in the unrealistic expectation that new models will just wither away;
- communications and information technologies have resulted less in global mass markets in education than in a fragmentation of markets, resulting in myriad niche markets on a global scale (ie it becomes possible to offer a course for 20 people located in different parts of the world);
- finally, technological 'solutions' which purport to address 'global' or 'borderless' education will always have to be articulated within and through local cultural screens, which include accreditation, cultural expectations and differences, and delivery issues.

References

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